

PHOTOGRAPHY HISTORY

Photography for Everyone. In 1888, George Eastman, an American dry-plate manufacturer, revolutionized photography by marketing the Kodak camera. The Kodak was a simple snapshot camera that could be used by amateurs. It held a roll of film that made a hundred pictures. After a person had used up the film, he returned the camera with the film still inside to Eastman's company in Rochester, N.Y. The company developed the film and printed the pictures, and returned the camera with a new roll of film in it.

The first roll film consisted of light-sensitive gelatin coated onto a paper backing. After the film had been developed, the gelatin emulsion was transferred from the paper onto a piece of glass. Then prints were made. Transferring the emulsion was difficult, and required too much skill for amateur photographers.

In 1889, Eastman substituted a Celluloid base for the paper. Printing photographs became much easier because the gelatin emulsion did not have to be removed from the base. Persons who wished to develop and print their own pictures could buy processing kits. Other persons followed Eastman's slogan: "You press the button, we do the rest." Photography became an international hobby.

During the late 1800's and early 1900's, scientists made other improvements in the tools and processes of photography. They introduced the time-temperature method of developing film, which greatly simplified the development process. They improved camera lenses, developed a precision enlarger, and increased the light-sensitivity of film and printing papers.

In 1924, the Leica camera was marketed in Germany. This miniature camera takes 35-millimeter film, the size used in making motion pictures. Many persons used the camera to take *candid photographs* (pictures taken without the subject's knowledge). In 1929, the

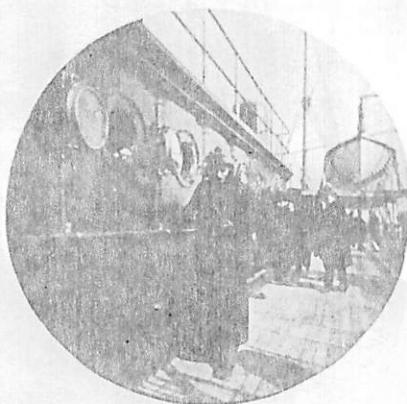
electric flashbulb was patented in Germany. Two years later, Harold E. Edgerton, an American engineer, developed electronic flash. Artificial lighting greatly increased the type of subjects that could be photographed.

As photography became more popular with amateur and professional photographers advanced photography in new ways. A French photographer, Jean-Auguste Atget, took photographs of Paris showing the city's people and its historic buildings and statues. In the United States, Alfred Stieglitz worked to establish photography as a creative art. In 1902, he and some other photographers formed the Photo-Secession, a group active in promoting photography as an art for until about 1910. One member, Edward Steichen, organized "The Family of Man" picture exhibit at New York City's Museum of Modern Art in 1955. It was one of the most popular exhibits ever held.

László Moholy-Nagy, a Hungarian who moved to the United States, made abstract photographs called *photograms*. He placed objects on a piece of print paper in the darkroom and exposed them with a flashlight. The American photographers Paul Strand and Edward Weston took detailed close-up photographs. Among Strand's photographs are large details of machines. Weston revealed the beauty of such natural shapes as peppers and cabbages. Walker Evans and Dorothea Lange photographed poverty-stricken farmers in the South during the 1930's.

Henri Cartier-Bresson, a French photographer, used a miniature camera to capture "decisive moments" in people's lives. His success in recording fleeting events and emotions has greatly influenced photojournalism. Margaret Bourke-White, an American, also produced important works of photojournalism. Ansel Adams, also of the United States, specialized in photographing scenes of nature, especially the mountains and deserts of the West.

Photography Today. Cameras and photographic equipment are both becoming more and more automatic.



George Eastman House

George Eastman holds one of the first Kodak cameras. The camera, identical with the one that took this picture in 1890, produced a hundred round negatives.

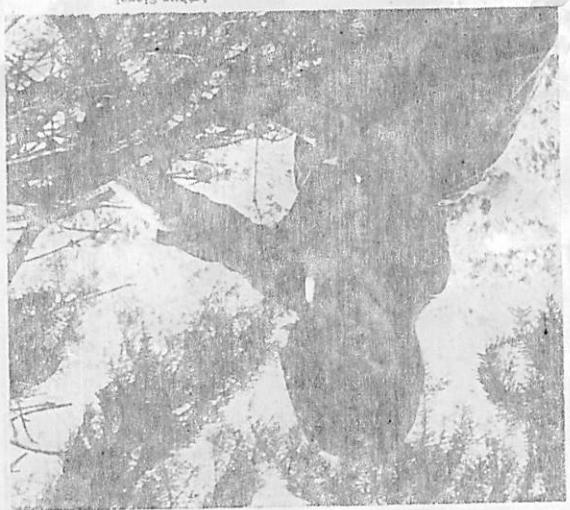


Courtesy of the Art Institute of Chicago, Alfred Stieglitz Collection



Edward Weston in his "Halved Cabbage" shows his style of emphasizing textures and sharp, clean lines.

Edward Weston



— FAMOUS FIRSTS IN PHOTOGRAPHY —

1-26 Joseph Nicéphore Niépce made the first permanent photo-tograph with a camera.

1839 Louis J. M. Daguerre announced his daguerreotype process, the first practical photographic method.

1843 William H. F. Talbot announced his invention of a negative-positive process of making photographs.

1851 Frederick Scott Archer invented the wet-collodion process, using glass plates to hold the emulsion.

1871 Richard L. Maddox introduced the dry-plate process, replacing collodion with gelatin.

1888 George Eastman introduced the Kodak camera, which made photography available to millions of persons.

1924 The Leica camera went on the market, and started the trended cameras can also reveal information about the scene in many fields of science. Special high-speed cameras can show the tiny illuminating in high-speed photography is taking an increasingly important place in the movie is displayed on the screen.

1931 Kodak E. Edgerton developed electronic flash.

1935 Eastman Kodak Company introduced Kodachrome film.

1942 Edwin Land introduced Kodacolor film.

1947 The Polaroid Corporation marketed a color film that enabled a new technique of 60-second photography.

1948 Edwin Land introduced his Polaroid Land Camera, beginning a new field of photography at high altitudes.

1951 Eastman Kodak Company introduced Kodachrome film.

1953 The Polaroid Corporation marketed a color film that developed in the camera in about 60 seconds.

1957 Polaroid introduced a home movie system that developed film instantly inside a cassette.



Photography has an important part in military and scientific work. Aerial photographs are necessary in the

Microscopic World). A microscope can take enlarged pictures of tiny cells, and bacteria (see Microscope [Science Project]).

A camera attached to a microscope can take pictures of stars and planets. When mounted on a bullet ship, or let scientists track the ocean floor, infrared film penetrates haze and smokes to reveal information about the scene in many fields of science. Special high-speed cameras can show the tiny illuminating in high-speed photography is taking an increasingly important place in the movie is displayed on the screen.

Many cameras have built-in exposure meters which automatically set the camera's controls (see Camera). Many darkrooms also have maps of ground areas is called *photogrammetry*. Police officers use photography when investigating almost any crime. They need photographic records of the place where the crime was committed. Pictures of a body, a broken window, or a damaged safe are used as evidence in many court trials. Pictures of fingerprints provide a record of ultraviolet light that the eye cannot see.

Radiographers use infrared and ultraviolet films to make valuable clues to the identity of criminals. Police laboratories use infrared and ultraviolet lights almost entirely on documents. These films record infrared blemishes and picture marks on documents. These films record infrared rays every year. Manufacturers are developing film methods of processing machines, introduced in 1963, Polaroid prints in seven minutes. Also in 1963, Polaroid produced color prints in color film for its cameras that develop pictures in about 60 seconds. In 1977, the Eastman Kodak produced instant home movie system in 1977. The camera consists of a camera, an 8-millimeter film cassette and a portable player with a screen. After filming, the cassette is inserted in the player. There, the film is developed and the movie is displayed on the screen.

Photographers can develop their own color pictures. A number of photographers who use color film without using a dark-room have machines that print pictures in 10 seconds. This process, which took 60 seconds to produce a print from black-and-white film in 1947, was introduced by Polaroid in 1977. The instant cameras provide a print that is 80 per cent dry. Seconds can produce a print that is 80 per cent dry. Seconds when it was introduced by Polaroid in 1947, when it was introduced by Polaroid in 1977.

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